

REMARKS

Claims 1-3, 5-6, 8-11 and 14-18 are pending in this application. Claims 1, 5, 17 and 18 have been amended. Claims 12 and 13 have been cancelled.

The specification has been objected to because the Examiner contends new matter has been introduced. Applicants have amended the specification, claims and abstract to place the application in the state it was prior to those amendments. Therefore, it is asserted that the objections to the specification have been overcome.

Claims 17 and 18 stand rejected under 35 U.S.C. 112, second paragraph. Applicants have made amendments to Claims 17 and 18 as suggested by the Examiner. These amendments obviate this rejection.

Claims 1-14 and 16-18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' admitted prior art in view of Weber et al. Weber et al. is cited by the Examiner as teaching that nickel vapor deposition on steel mandrels have essentially the same coefficient of thermal expansion. The Examiner then goes on to conclude that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a mandrel of prior art material having essentially the same coefficient of thermal expansion as a nickel sleeve e.g., with the expectation of preventing distortion such as warping when heated or cooled. This rejection is traversed.

Applicants have amended Claim 1 to include the limitation of curing the topcoat layer at a temperature of 275°C or more. Support for this amendment is found on page 10, lines 18-27 in the specification as originally filed. Weber et al. is concerned with producing nickel shell molds for doors, window sashes, furniture, cabinet tops, coffins and ornamental drawers (col. 3, lines 19-25) that have a textured surface of wood, leather, cloth and like materials. There is never mention of making a replacable fuser roller member. In fact, the teaching of Weber et al. would not allow one to provide a nickel sleeve. Weber et al. show that one has to make a negative mold of a textured surface with silicone. This negative silicone mold is then positioned under a steel mandrel to define a cavity having a depth of 0.2 centimeters between the surfaces of the negative

mold and the steel mandrel. Silicone that is nonadherent to the negative mold is injected in this cavity and cured. The mandrel is removed and a positive mold master is obtained. This positive master is subjected to vapor deposition. (col 3, lines 10-53). One could not provide a nickel sleeve through this process as the mandrel is removed by inversion. It would, therefore, be impossible to produce a nickel sleeve from such a process. Thus, Weber et al. do not teach mounting a nickel sleeve on a mandrel and cannot render the present invention obvious. Weber et al. is, therefore, not pertinent art.

Furthermore, Weber does not show every step in Applicants claims and the 103 rejection is improper. The claims of the present invention require that the topcoat layer be cured at a temperature of 275°C or more. Assuming it was possible to provide a sleeve through the nickel deposition process of Weber et al., such a nickel sleeve would not be able to withstand the high temperatures required to cure the cushion layer and topcoat layer as required by Applicants claims. Weber et al. vapor deposit the nickel at a temperature of 177°C. (col. 3, lines 48-53). Such a layer would not be able to withstand the high temperatures (275°C or more) required in applying coatings for the topcoat layer. It would be impossible to vapor deposit high temperature nickel at 177°C. Thus, the Examiners combination is ineffective and the rejection should be removed. The Examiner has taken the position that nickel vapor deposition is carried out at temperatures higher than 300°C. The Examiner has not provided evidence of this. In fact, as detailed above, this contradicts the teachings of Weber et al. Moreover, it is noted that Weber et al. never mention applying a coating over the nickel shell. Thus, this rejection is flawed in that: 1) it does not teach providing a nickel sleeve; 2) as applied by the Examiner it would be ineffective to make a fuser roller; and 3) it does not show every step in Applicants claim.

Claims 1-14 and 16-18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' admitted prior art in view of Weber et al., Hartley et al., and Chen et al. The rejection is traversed. The Examiner asserts that Weber et al. would render obvious using a mandrel having essentially the same coefficient of thermal expansion as a nickel sleeve. This assertion is supported by the Examiner through hindsight reconstruction which is impermissible. Although, Weber et al. teach applying nickel through vapor deposition to steel mandrels that have

essentially the same coefficient of thermal expansion, the Weber et al. process would be ineffective to produce a sleeve as explained above. Weber et al. do not teach providing a high temperature nickel sleeve. Weber et al. also require a thickness of the nickel sheet to be about 0.3 inches (col 1, line 59-64 and col 3, lines 48-52). As claimed in the present invention (Claim 6) the maximum thickness of the sleeve is 0.05 inches. Thus, combining Weber et al., Hartley et al., and Chen et al. would not yield Applicants claimed invention.

Weber et al. require that in order to make a nickel mold, one must secure an article to a base having a perimeter and forming a dam about the perimeter. This is an impossibility with a sleeve. Thus, the primary reference cited by the Examiner does not teach providing a nickel made of high temperature nickel. This failure renders the rejection under 35 U.S.C. 103(a) improper as an essential element of the claim is not taught or suggested by the references of record. The secondary references of Hartley et al., and Chen et al. do not correct this deficiency in the Examiners rejection. In addition, Hartley et al. do not teach curing a topcoat layer at 275°C or more. This failure of Hartley et al. to meet the curing layer of the instant claims is another reason the combination proposed by the Examiner would be ineffective. In view thereof, it follows that the subject matter of the claims would not have been obvious of Applicants' admitted prior art in view of Weber et al., Hartley et al., and Chen et al. at the time the invention was made.

Claims 1-14 and 16-18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' admitted prior art in view of Weber et al.. Applicants' admitted prior art in view of Weber et al., Hartley et al., and Chen et al., further in view of Badesha et al. Badesha does not provide anything to correct the combination of Weber et al., Hartley et al., and Chen et al. Badesha et al. teach curing the topcoat layer at a temperature of 200°C. This is below Applicants claimed limit and is further evidence that this combination would not produce Applicants invention. In view thereof, it follows that the subject matter of the claims would not have been obvious of Applicants' admitted prior art in view of Weber et al., Applicants' admitted prior art in view of Weber et al.,

Hartley et al., and Chen et al., further in view of Badesha et al. at the time the invention was made.

Claim 4 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' admitted prior art in view of Weber et al., Applicants' admitted prior art in view of Weber et al., Hartley et al., and Chen et al., further in view of Petropoulos et al. The rejection is traversed. Petropoulos et al. is cited to teach different mandrel material. It does not correct the deficiencies of the Weber et al., Hartley et al., and Chen et al. combination.

Claim 14 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' admitted prior art in view of Weber et al., Hartley et al., and Chen et al., further in view of Mikkelsen. The rejection is traversed. Mikkelsen does not correct the deficiencies of the Weber et al., Hartley et al., and Chen et al., combination.

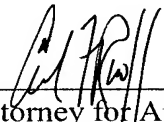
Claim 11 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' admitted prior art in view of Weber et al., Applicants' admitted prior art in view of Weber et al., Hartley et al., and Chen et al., further in view of Schlueter, Jr. et al. The rejection is traversed. Schlueter, Jr., et al is cited for teaching antimony tin oxides. Again, this does nothing to correct the problems associated with the primary combination.

Applicants have reviewed the prior art made of record and believe that singly or in any suitable combination, they do not render Applicants' claimed invention unpatentable.

In view of the foregoing remarks and amendments, Claims 1-3, 5-6, 8-11 and 14-18 are now deemed allowable and such favorable action is courteously solicited.

Should the Examiner consider that additional amendments are necessary to place the application in condition for allowance, the favor is requested of a telephone call to the undersigned counsel for the purpose of discussing such amendments.

Respectfully submitted,



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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.